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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/589,463	09/19/2008	Jose Carlos Brito Lopes	2006-1364A	7225

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WENDEROTH, LIND & PONACK, L.L.P.
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EXAMINER

PRAKASH, GAUTAM

ART UNIT	PAPER NUMBER
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1775

NOTIFICATION DATE	DELIVERY MODE
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12/05/2011

ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

ddalecki@wenderoth.com
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Office Action Summary	Application No.	Applicant(s)	
	10/589,463	BRITO LOPES ET AL.	
	Examiner	Art Unit	
	GAUTAM PRAKASH	1775	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 November 2011.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ An election was made by the applicant in response to a restriction requirement set forth during the interview on ____; the restriction requirement and election have been incorporated into this action.
- 4) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 5) ☒ Claim(s) 1-4 and 6-12 is/are pending in the application.
- 5a) Of the above claim(s) 9 and 10 is/are withdrawn from consideration.
- 6) ☐ Claim(s) ____ is/are allowed.
- 7) ☒ Claim(s) 1-4, 6-8, 11 and 12 is/are rejected.
- 8) ☐ Claim(s) ____ is/are objected to.
- 9) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 10) ☐ The specification is objected to by the Examiner.
- 11) ☒ The drawing(s) filed on 14 August 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 12) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. ____. |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>14 November 2006</u> . | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Information Disclosure Statement

1. The examiner has considered the Information Disclosure Statement (IDS) filed on 14 November 2006. A copy of the portion of the IDS listing the references is being returned to the Applicant along with this Office action and serves, both as acknowledgement of receipt of the IDS, and as an indication as to which references the examiner considered.
2. The examiner notes that the specification as filed contains several references. Applicant is reminded that listing references in the specification is not a proper IDS. 37 C.F.R. § 1.98(b) requires a list of all patents, publications, or other information submitted for consideration by the Office, and M.P.E.P. § 609.04(a) states, “the list may not be incorporated into the specification but must be submitted in a separate paper.” Therefore, unless the references have been cited by the examiner or by Applicant on Form PTO/SB/08a, PTO/SB/08b, or equivalent, they have not been considered.

Election/Restriction

3. Applicant’s election with traverse of Group I, claims 1 to 4, 6 to 8, 11, and 12 in the reply filed 09 November 2011 is acknowledged. The traversal is on the ground(s) that the special technical feature has not been shown within the references. This is not found persuasive. As indicated in the Claim Rejections section(s) *infra*, the technical feature does not make a contribution over the prior art. Therefore, the requirement is still deemed proper and is therefore made FINAL.
4. Claims 1 to 4, 6 to 8, 11, and 12 are examined and claims 9 and 10 are withdrawn from further consideration pursuant to 37 C.F.R. § 1.142(b) as being drawn to a non-elected invention.

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Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 C.F.R. § 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 C.F.R. § 1.48(b) and by the fee required under 37 C.F.R. § 1.17(i).

Claim Objections

5. Claims 2 to 4, 6 to 8, 11, and 12 are directed to a network mixer while claim 1 is directed to a static mixer. Appropriate correction is required.

6. Claims 11 and 12 are objected to because of the following informalities: there appears to be one or more words missing between “that” and “comprises” (“it”, “the mixer”?). Appropriate correction is required.

Claim Rejections - 35 U.S.C. § 112

7. The following is a quotation of the second paragraph of 35 U.S.C. § 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

8. Claims 1 to 4, 6 to 8, 11, and 12 are rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

9. Claims 1 to 4, 6 to 8, 11, and 12 recite the term “at least two additional apertures (0)”. It is unclear what these at least two apertures are additional to.

10. Claim 2 contains the term “and/or”. This term is indefinite because it is not clear whether Applicant intends this term to be conjunctive or disjunctive.

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11. Claim 2 also contains the term “its characteristic elements (0, 1, 2)”. It is unclear what “it” is qualified by the use of the possessive “its”.

12. Claims 4 and 12 recite the term “the referred surface”. There is insufficient antecedent basis for this term in the claims or in claim 1, from which claims 4 and 12 depend.

13. Claims 7 and 8 recite the term “the plane xy”. There is insufficient antecedent basis for this term in the claims or in claim 1, from which claims 7 and 8 depend.

14. Claim 8 recites the term “is accomplished by a combined way”. It is unclear how the injection of the feed streams can be accomplished by a combined way.

15. Claims 11 and 12 contain the term “simultaneously basic cells”. It is unclear how a cell (a structural unit) can be “simultaneous” considering that simultaneity is a temporal, and not a structural, feature.

Claim Rejections - 35 U.S.C. § 102

16. The following is a quotation of the appropriate paragraphs of 35 U.S.C. § 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

17. Claims 1, 2, 6 to 8 are rejected under 35 U.S.C. § 102(b) as being anticipated by Kubo *et al.* (EP 1 036 588), cited in the International Search Report (ISR) mailed 28 June 2005, in the Written Opinion of the International Searching Authority (WOISA) issued 13 August 2006, in IDS filed 14 November 2006, and in the International Preliminary Report on Patentability (IPRP) issued 28 November 2007.

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18. Regarding claims 1 and 2, Kubo *et al.* teach a static mixing device comprising a set of cells with a series of chambers connected with each other in three-dimensional space with at least two channels and apertures, with the channels oblique relatively to the direction of the flow within the mixer. The cells present different linear and angular dimensions of the chambers, channels, and apertures (Kubo *et al.* at Figure 13).

19. Regarding claims 6 to 8, the manner of operating a claimed device does not patentably distinguish it from the prior art. Apparatus claims cover what a device is, not what a device does. M.P.E.P. § 2114, emphasis in original.

Claim Rejections - 35 U.S.C. § 103

20. The following is a quotation of 35 U.S.C. § 103(a) that forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

21. Claims 3, 4, 11, and 12 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Kubo *et al.* (EP 1 036 588), cited in the ISR mailed 28 June 2005, in the WOISA issued 13 August 2006, in IDS filed 14 November 2006, and in the IPRP issued 28 November 2007, as applied to claims 1, 2, 6 to 8 *supra*.

22. Regarding claims 3 and 11, Kubo *et al.* do not teach that the chamber is spherical and the channels are cylindrical. However, the simple substitution of known elements (different chamber and channel shapes) to obtain predictable outcomes is *prima facie* obvious. M.P.E.P. §

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2141. In addition, changes in the shapes of the chamber and channel are *prima facie* obvious to one of ordinary skill in the art. M.P.E.P. § 2144.04.

23. Regarding claims 4 and 12, Kubo *et al.* do not teach that the chamber is cylindrical and the channels are rectangular prismatic. However, the simple substitution of known elements to obtain predictable outcomes is *prima facie* obvious. M.P.E.P. § 2141. As stated *supra*, changes in the shapes of the chamber and channel are *prima facie* obvious to one of ordinary skill in the art. M.P.E.P. § 2144.04.

Conclusion

No claim is allowed.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to GAUTAM PRAKASH whose telephone number is 571-270-3030. The examiner can normally be reached on Monday, Tuesday, Thursday, and Friday from 8:30 am to 7:00 pm, Eastern Time.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Marcheschi can be reached on 571-272-1374. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, go to <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, please contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (in USA or CANADA) or 571-272-1000.

/G.P./

Examiner, Art Unit 1775

/Michael A. Marcheschi/

Supervisory Patent Examiner, Art Unit 1775